

UTILITY PATENT APPLICATION
UNDER 37 CFR 1.53(b)

HONORABLE COMMISSIONER OF
PATENTS AND TRADEMARKS
Washington D.C. 20231

Case Docket No. 4495-001

Sir:

Transmitted herewith for filing is the patent application of

INVENTOR: Shigeo Ozawa
FOR: AN ACCOMMODATION BAG

Enclosed are:

- ☒ 9 pages of specification, claims, abstract
- ☒ Declaration & Power of Attorney.
- ☒ Priority Claimed
- ☐ Certified copy of
- ☒ 1 sheets of formal drawing.
- ☒ An assignment of the invention to Office Ozawa Co., Ltd.
and the assignment recordation fee.
- ☒ Return Receipt Postcard
- ☒ A verified statement to establish small entity status under 37
CFR 1.9 and 37 CFR 1.27.
- ☐ Information Disclosure Statement, Form PTO-1449
- ☐ Copies of IDS citations
- ☒ Preliminary Amendment

The filing fee has been calculated as shown below:

(1) FOR	(2) NO. FILED	(3) NO. EXTRA	(4) RATE	(5) AMOUNT
TOTAL CLAIMS	9	-20	0	x \$ 9.00 = \$0.00
INDEPENDENT CLAIMS	1	-3	0	x \$39.00 = 0.00
MULTIPLE DEPENDENT CLAIM(S) (If applicable)				+ \$130.00 = 00.00
			BASIC FEE	\$ 380.00
			Total of above calculations=	\$380.00
<input checked="" type="checkbox"/> Assignment & Recording Fee				\$ <u>40.00</u>
			TOTAL FEE	\$420.00

- ☒ Attached is a check in the amount of \$ 420.00. A duplicate copy of this sheet is enclosed.
- ☒ The Commissioner is hereby authorized to charge payment of the following fees associated with this communication or credit any overpayment to Deposit Account No. 07-1337. A duplicate copy is enclosed.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of :
Shigeo Ozawa :
Serial No. :
Filed: March 2, 2000 :
For: AN ACCOMMODATION BAG :

TRANSMITTAL OF VERIFIED STATEMENT
CLAIMING SMALL ENTITY STATUS

Honorable Commissioner of
Patents and Trademarks
Washington, D.C. 20231

Sir:

Transmitted herewith for filing in the above-referenced
application is the following:

VERIFIED STATEMENT CLAIMING SMALL ENTITY STATUS -

SMALL BUSINESS CONCERN

Respectfully submitted,

LOWE HAUPTMAN GOPSTEIN
GILMAN & BERNER, LLP

Kenneth M. Berner

Kenneth M. Berner
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1700 Diagonal Road, Suite 310
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(703) 684-1111 KMB:jad
Date: March 6, 2000

Applicant or Patentee: Shigeo OZAWA Attorney's Docket No.: 4495-001
Serial or Patent No.: _____
Filed or Issued: _____
For: An Accommodation Bag

VERIFIED STATEMENT (DECLARATION) CLAIMING SMALL ENTITY STATUS
(37 CFR 1.9(f) and 1.27(c)) - SMALL BUSINESS CONCERN

I hereby declare that I am

- ☐ the owner of the small business concern identified below:
☒ an official of the small business concern empowered to act on behalf of the concern identified below:

NAME OF ORGANIZATION: OFFICE OZAWA Co., Ltd.
ADDRESS OF ORGANIZATION: 7-9, Mita 2-chome, Minato-ku, Tokyo 108-0073 JAPAN

I hereby declare that the above identified small business concern qualified as a small business concern as defined in 13 CFR 121.3-18, and reproduced in 37 CFR 1.9(d), for purposes of paying reduced fees under section 41(a) and (b) of Title 35, United States Code, in that the number of employees of the concern, including those of its affiliates, does not exceed 500 persons. For purposes of this statement, (1) the number of employees of the business concern is the average over the previous fiscal year of the concern of the persons employed on a full-time, part-time or temporary basis during each of the pay periods of the fiscal year, and (2) concerns are affiliates of each other when either, directly or indirectly, one concern controls or has the power to control the other, or a third party or parties controls or has the power to control both.

I hereby declare that rights under contract or law have been conveyed to and remain with the small business concern identified above with regard to the invention, entitled An Accommodation Bag
by inventor(s) Shigeo OZAWA
described in

- ☐ the specification filed herewith.
☐ application Serial No. _____, filed _____.
☐ patent no. _____, issued _____.

If the rights held by the above identified small business concern are not exclusive, each individual, concern or organization having rights to the invention is listed below* and no rights to the invention are held by any person, other than the inventor, who could not qualify as an independent inventor under 37 CFR 1.9(c) if that person made the invention, or by any concern which would not qualify as a small business concern under 37 CFR 1.9(d) or a nonprofit organization under 37 CFR 1.9(e). *NOTE: Separate verified statements are required from each named person, concern or organization having rights to the invention averring to their status as small entities. (37 CFR 1.27)

NAME _____
ADDRESS _____
☐ INDIVIDUAL ☐ SMALL BUSINESS CONCERN ☐ NONPROFIT ORGANIZATION

NAME _____
ADDRESS _____
☐ INDIVIDUAL ☐ SMALL BUSINESS CONCERN ☐ NONPROFIT ORGANIZATION

I acknowledge the duty to file, in this application or patent, notification of any change in status resulting in loss of entitlement to small entity status prior to paying, or at the time of paying, the earliest of the issue fee or any maintenance fee due after the date on which status as a small entity is no longer appropriate. (37 CFR 1.28(b))

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application, any patent issuing thereon, or any patent to which this verified statement is directed.

NAME OF PERSON SIGNING: Shigeo OZAWA
TITLE IN ORGANIZATION: OFFICE OZAWA Co., Ltd.
ADDRESS OF PERSON SIGNING: c/o OFFICE OZAWA Co., Ltd. 7-9, Mita 2-chome, Minato-ku Tokyo
SIGNATURE: SHIGE OZAWA 108-0073 JAPAN
DATE: 15 February, 2000

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of :
Shigeo Ozawa :
Serial No. : Group Art Unit:
Filed: Herewith : Examiner:
For: AN ACCOMMODATION BAG :

AMENDMENT

Honorable Commissioner of
Patents and Trademarks
Washington, D. C. 20231

Sir:

Prior to examination of the above-identified application,
please amend the application as follows.

IN THE CLAIMS

Please amend the claims as follows:

3. (Amended) An accommodation bag described in claim 1 [or
2], wherein the outer bag is equipped with a vapor releasing hole.

4. (Amended) An accommodation bag described in [either of]
claim 1 [to claim 3], wherein a boiled water releasing hole is
equipped on the bottom face of the outer bag.

5. (Amended) An accommodation bag described in [either of]

claim 1 [to claim 4], wherein the accommodation bags are capable of passing the boiled water through.

6. (Amended) An accommodation bag described in [either of claims to 1 to 5] claim 1, wherein at least one of the bags accommodates a liquid and a heating means for heating the liquid thereof.

7. (Amended) An accommodation bag described in [either of] claim 1 [to claim 6], wherein the vapor releasing hole is sealed by a member being equipped with a vapor blow out time adjusting function.

8. (Amended) An accommodation bag decried in [claims 1 to 7] claim 1, wherein the vapor releasing hole is formed integrally with an expansion free display means for displaying an inside pressure of the outer bag, depending on the degree of expansion.

9. (Amended) An accommodation bag described in claim 1 [to claim 8], wherein the heating means is installed in a sealed container being sheltered from the inside of the accommodation bag in a manner that at least two kinds of materials, which generate a heat by chemical reaction, are separately stored so as to be mixed by an outer pressure.

REMARKS

Claim 3-9 have been amended to eliminate the multiple dependency thereof.

Entry of this Preliminary Amendment is respectfully requested and deemed in order.

Respectfully submitted,

LOWE HAUPTMAN GOPSTEIN GILMAN & BERNER, LLP

Kenneth M. Berner

Kenneth M. Berner
Registration No. 37,093

1700 Diagonal Road, Suite 310
Alexandria, Virginia 22314
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Date: March 6, 2000

Facsimile: 703-518-5499

TITLE OF THE INVENTION: AN ACCOMMODATION BAG

BACKGROUND OF THE INVENTION

1. FIELD OF THE INVENTION

This invention relates to an accommodation bag wherein mixing of plural number of liquids to be processed (heating or mixing), or of the aforementioned liquids and goods is made possible in one external package by heating with the usage of an outer pressure or a microwave oven and the like, and an accommodation bag equipped with a heat generation means for generating a heat generation chemical reaction in an independent bag in the liquid accommodation bag without being mixed with the liquids, and making it possible for using only the heat thus generated.

2. DESCRIPTION OF THE PRIOR ART

Conventionally, when a liquid or the plural number of goods are planned to be used by heating or mixing, it required a labour and a time for preperation of a heating apparatus as they are stored in separate containers and the like respectively. There has been no apparatus having such a structure as to carry out these operations in one outer package easily. As to the foods, for saving a cooking time and a labour, the frozen foods or processed foods, which are cooked foods being frozen in a pack, are used as easily preparable ones for edible condition. As to such a beverage as tea or coffee, it requires water and heating, and generally takes a time/labour for preparation. Nothing is existed so far for which becomes drinkable by applying the heat only.

SUMMARY OF THE INVENTION

1. PROBLEMS TO BE RESOLVED BY THE INVENTION

When the plural kinds of liquids of different quality are mixed or mixed with other goods, there has been a problem that the quality is rapidly deteriorated. In the case of the foods, the taste is lost and a validity period is shortened as well. The frozen foods have a problem that it takes time and labour for thawing and the taste becomes deteriorated. As to the processed foods, since it is preseasoned, the taste is lowered if it elapses a long time. There are some which become edible just by heating with a microwave oven, but a variety is limited and seasoning is also limited to a simple one.

2. MEANS OF SOLVING THE PROBLEM

For making it possible to easily carry out heating or mixing of plural goods in one bag, this invention has a basic structure wherein the plural number of accommodation bags are installed in one outer bag in a manner that at least one of which is a liquid accommodation bag, having a heating means in it when necessary. Namely, it is constituted with a heat resistance outer bag having a vapor releasing hole on a top face, which is to be formed in accordance with an inside pressure of the accommodation bag, and a heat resistance liquid accommodation bag being installed in the outer bag accommodating the foods accommodation bag and the liquid. When the accommodation bag is heated by a microwave oven and the like, the liquid in the liquid accommodation bag flows out by a pressure inside the bag so as to make it possible for immersing and heating the foods in the foods accommodation bag, which allows a passage of the liquid. Also, in a case

that the number of liquid accommodation bag is plural, the mixture of the plural liquids is carried out in one outer bag.

The accommodation bag is also constituted with a heat resistance outer bag having a vapor releasing hole on the upper face and a hot water releasing hole formed on the bottom face, a heat resistance liquid/foods accommodation bag which accommodates the liquid/foods and allows the passage of the hot water is installed in the outer bag, and a heat resistance liquid accommodation bag which accommodates the liquid and is installed in the outer bag piled over the liquid/foods accommodation bag, wherein the liquid in the liquid accommodation bag is made to boil and the boiled water flows out over the liquid/foods accommodation bag when the outer bag is heated by the microwave oven and the like. Also, the vapor releasing hole, the hot water releasing hole and a means provided with the liquid accommodation bag for making the liquid flow out possible are holes to be formed respectively by heating, and are covered by sealings before being heated. Stripping off timing of the seals are different depending on the holes respectively. Therefore, vapor flow up time can be set arbitrarily, depending on the difference of heating conditions, strength or material of the seal. An expansion free displaying means is mounted so as to make a vapor pressure variation inside the accommodation bag visible.

Further, as to a method for heating the outer bag, the problem is solved by installing a heating means in the liquid accommodation bag. Namely, the heating means is independently installed in the liquid accommodation bag and has a means to obtain a heat generation by mixing, when they are used, at least two kinds of materials for generating the heat by chemical

reaction.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a brief cross-sectional view of the accommodation bag,

FIG. 2 is an operation explanation drawing of the accommodation bag,
and

FIG. 3 is an explanatory drawing of the display bag expandedly formed
accompanied by rising of an internal vapor pressure.

DETAILED DESCRIPTION OF THE INVENTION

1. EMBODIMENTS OF THE INVENTION.

As shown in Fig.1, the accommodation bag comprises the outer bag 1, the liquid accommodation bag 3, the accommodation bag 7 which accommodates eating/drinking goods and the like, and the heating means 6. Each of the bag is made by adhering the two piled up sheets of synthetic resin material being superior in a heat resistance and by applying a heat sealing to its periphery. On the top face of the outer bag 1, a vapor pressure releasing hole 4 is formed, and on the bottom face of the bag 1, a hot water releasing hole 5 is formed and they are covered by seals. Since an inner part of the outer bag 1 becomes a high pressure, the reinforcement seals are pasted to an outside of the top face, and an inside of the bottom face so that the holes are not torn out. A vapor pressure discharge adjusting packing seal is pasted to an inside of the upper face. The vapor pressure discharge adjusting packing seal is formed with a foaming polyester, flocked polyurethane foam and the like, which are durable for water and superior in

gas permeability and elasticity having a width of 2mm to 5mm degree.

The liquid accommodation bag 3 is also made of two similar synthetic resin material sheets by being piled over similarly to that of the outer bag 1, whose periphery is heat sealed and formed in a bag shape, in which a fluid is accommodated. The liquid in the liquid accommodation bag 3 outflows from the bag 3 when it is heated, but an outflow temperature of the liquid can be adjusted by a position of the hole. In the figure, the liquid flow-out hole position is formed on the top so as to flow out as a vapor, the hole may be formed at the bottom. In this case, a vapor pressure inside the liquid accommodation bag 3 should be closed so that it is opened at a higher vapor pressure than the one when the hole is formed at the top. The fig.2 is describes a status where the liquid is flowed out from the bag 3, and the fig.3 describes a status where the vapor releasing hole 4 is formed on the expansion free member, which becoming visible by expansion of the vapor pressure inside the accommodation bag. Both of figures are describing where the heating means 6 is installed in the bag 3 but, when heating is carried out by the microwave oven, the heating means 6 is not required to be installed in an accommodation bag 7. A heating time display 8 in the fig.3 is displaying a vapor blow up time. It can be useful for preventing a danger.

In the eating/drinking goods accommodation bag 7, a favorite beverage such as a black tea, Japanese tea, oolong tea and the like may be accommodated. The bag is made by overlaying two sheets of capillitium net or a non-woven cloth formed with a synthetic resin material. The sheet is superior in heat resistance and cold resistance property. The periphery of the sheet is also adhered in degree of 5mm or 10mm width. The bag 7 is

also acting as a filtering bag. When the ground coffee beans are accommodated, the bag is used as an eating/drinking goods accommodation bag 7 in a condition that the ground beans are clamped with a filtering paper from the above and the bottom. At the bottom of the eating/drinking goods accommodation bag 7, one or several or crossing synthetic resin material fiber thread of 0.5mm degree or a net is provided so as to rapidly and smoothly passes hot water of the black tea or coffee, and carry out a pressure adjusting function smoothly in the eating/drinking goods accommodation bag 7. The eating/drinking goods accommodation bag 7 is pasted to a bottom inner side of the outer bag 1 with heat sealing.

With reference to the heating device 6 installed inside the liquid, it is considered to be a double constitution for utilizing a chemical reaction, wherein an oleaginous oil is used on one part and a compound and the like composed of calcium and carbon is used on the other so that it yields a high temperature by reacting them when they are used.

2. EFFECTS OF THE INVENTION

The accommodation bag of this invention enables, as described above, to provide a cooking method of entirely new, simple and capable of processing or seasoning with the usage of a heat generation apparatus such as a microwave oven. Also, the bag is so deliberated that the favorite beverage such as a coffee, tea and the like is made ready for a drinkable condition without newly preparing a water. Further, the bag enables to supply a plural of materials, without deteriorating the tastes, keeping their quality stable, since the mixture or processing can be carried out when they are

used.

Likewise, since it provides a simple processing method wherein even a heat generation device such as the electronic oven is not required due to an internal heat generating apparatus, this invention can greatly contribute to the industry as the relief goods at the time of an emergency such as an occurrence of the earthquake and the like or an accident, or for areas where a relief is asked for.

EXPLANATION OF CODE

- 1 Outer bag
- 2 Liquid releasing hole
- 3 Liquid accommodation bag
- 4 Vapor releasing hole
- 5 Boiled water releasing hole
- 6 Heating means
- 7 Accommodation bag
- 8 Heat time display

What is claimed is:

- 1/ An accommodation bag wherein it comprises, an outer bag and one or more accommodation bags which have independent spaces from the outer bag and are yet accommodated in the outer bag.
2. An accommodation bag described in claim 1, wherein at least one of the accommodation bags is made capable of outflowing an inside liquid by heating.

3. An accommodation bag described in claim 1 or 2, wherein the outer bag is equipped with a vapor releasing hole.
4. An accommodation bag described in either of claim 1 to claim 3, wherein a boiled water releasing hole is equipped on the bottom face of the outer bag.
5. An accommodation bag described in either of claim 1 to claim 4, wherein the accommodation bags are capable of passing the boiled water through.
6. An accommodation bag described in either of claims to 1 to 5, wherein at least one of the bags accommodates a liquid and a heating means for heating the liquid thereof.
7. An accommodation bag described in either of claim 1 to claim 6, wherein the vapor releasing hole is sealed by a member being equipped with a vapor blow out time adjusting function.
8. An accommodation bag described in claims 1 to 7, wherein the vapor releasing hole is formed integrally with an expansion free display means for displaying an inside pressure of the outer bag, depending on the degree of expansion.
9. An accommodation bag described in claim 1 to claim 8 wherein the heating means is installed in a sealed container being sheltered from the inside of the accommodation bag in a manner that at least two kinds of materials, which generate a heat by chemical reaction, are separately stored so as to be mixed by an outer pressure.

ABSTRACT

This invention consists of an accommodation bag such that one outer bag accommodates multiple inner accommodation bags and at least one of the inner accommodation bags is a liquid-accommodation bag from which a liquid flows. Also, the liquids or goods that flow out from other multiple accommodation bags in the outer bag are processed and used by mixing with or coming into contact with each other. Therefore, it is also possible to use the processed liquid for drinking or eating by taking it via the bottom of the outer bag. As a heating means, either an outside means, such as a microwave oven or the like, or an independent container installed inside the liquid-accommodation bag, is used. The heat-generation means inside the liquid-accommodation bag is such that heat is generated when there are combined together at least two kinds of materials that generate heat by chemically reacting together, and such that only such generated heat can be utilized.

FIG. 1

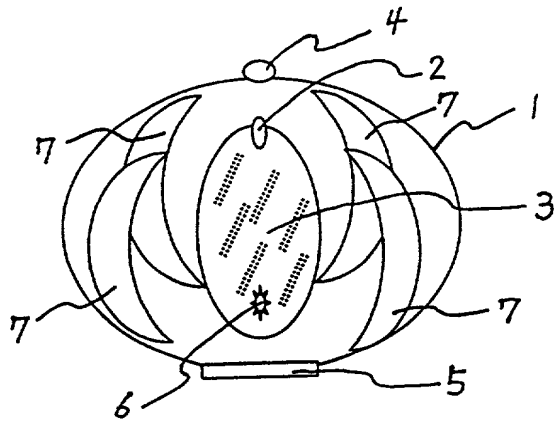


FIG. 2

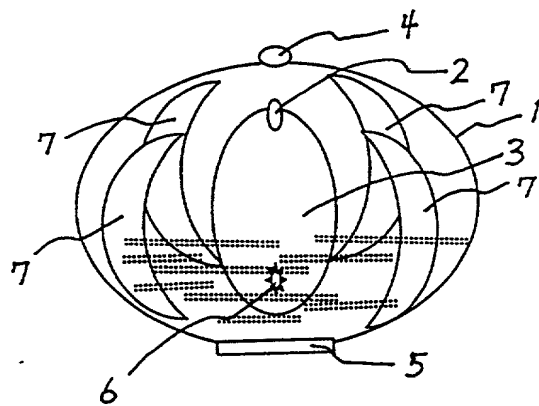
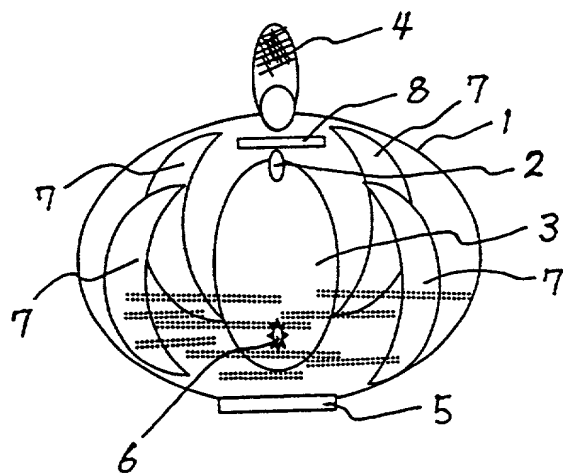


FIG. 3



Docket No.: 4495-001

DECLARATION AND POWER OF ATTORNEY

As a below named inventor, I hereby declare that:

My residence, post office and citizenship are as stated below next to my name,

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter claimed and for which a patent is sought on the invention entitled An Accommodation Bag

the specification of which ☒ is attached hereto ☐ was filed on _____ as Application Serial No. _____ and was amended on _____ (if applicable)

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is known to me to be material to patentability in accordance with Title 37, Code of Federal Regulations, Section 1.56.

I hereby claim foreign priority benefits under Title 35, United States Code, Section 119(a)-(d) or Section 365(b) of any foreign application(s) for patent or inventor's certificate, or Section 365(a) of any PCT international application which designated at least one country other than the United States, listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed:

Prior Foreign Application(s):			Priority Claimed	
Number	Country	Day/Month/Year filed	Yes	No
H11-313128	JAPAN	2/11/1999	X	

I hereby claim the benefit under 35 USC §119(e) of any United States provisional application(s) listed below.

Prior Provisional Application(s):	
Application Number	Filing Date

I hereby claim the benefit under Title 35, United States Code, Section 120 of any United States application(s), or Section 365(c) of any PCT international application designating the United States, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT international application in the manner provided by the first paragraph of Title 35, United States Code, Section 112, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, Section 1.56 which occurred between the filing date of the prior application and the national or PCT international filing date of this application:

Prior U. S. Application(s):		
Serial No.	Filing Date	Status: Patented, Pending, Abandoned

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

[illegible]

with full power of substitution and revocation, to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith, and all future correspondence should be addressed to them.

Post Office Address: